



**DEPARTMENT OF PESTICIDE REGULATION
PESTICIDE REGISTRATION AND EVALUATION COMMITTEE
Meeting Minutes – March 21, 2008**

Committee Members/Alternates in Attendance:

Patti L. TenBrook, U.S. Environmental Protection Agency, Reg. 9 (U.S. EPA)
Martha Harnly, Department of Public Health (CDPH-EHIB)
Barry Wilson, University of California Department of Environmental Toxicology (UCD)
Lynn Baker, Air Resources Board (ARB)
Syed Ali, State Water Resources Control Board (SWRCB)
Dennis Patzer, Structural Pest Control Board (SPCB)
Rebecca Sisco, University of California IR-4 Program
Tobi Jones, Department of Pesticide Regulation (DPR)
Stella Borucki, Department of Fish and Game (DFG)

Visitors in Attendance:

Louise Mehler, DPR
Mark Robertson, DPR
Nasser Dean, Western Plant Health Assn.
Henry Buckwalter, Compliance Services International
David Luscher, CDFA
Joyce Gee, DPR
Eileen Mahoney, DPR
Anne Downs, DPR
Aaron Campbell, OEHHA
Kathleen Haley, Inside CAL/EPA-newsletter
Denise Webster, DPR
Rachel Kubiak, DPR
Jeanne Martin, DPR
Jim Wells, Environmental Solutions Group
Dave Lawson, Lawson and Associates
Nisreen Jaradat, DPR
Susan Edmiston, DPR
Nita Davidson, DPR
Tom Babb, DPR
Artie Lawyer, Technology Sciences Group
Aron Lindgren, DPR
Brian Bret, Dow AgroSciences, LLC
Heather Baugh, Best and Krieger, LLP
Bob Elliott, DPR
Roberta Firoved, California Rice Commission
Angela Csondes, ARB



1. Introductions and Committee Business – Tobi Jones, Chairperson, DPR
 - a. About 35 people attended the meeting.
 - b. There were no corrections to the minutes of the previous meeting held on January 18, 2008.
2. Alternatives to Soil Fumigation – Mark Robertson, Pest Management and Licensing Branch

Use of soil fumigants entails recognized risks to human health and the environment. The goal of reducing these risks and hazards has generated interest in fumigant alternatives. In addition to replacement of currently used soil fumigants with new chemicals and cultural practices, changes in fumigant application methods can reduce emissions into the atmosphere.

Fumigant Application Methods: Benefits have been demonstrated from deeper soil injection, change in time or season of application, soil amendments, water seals, improved tarping materials, and drip application of fumigants. All of these techniques can reduce problems associated with fumigant emissions and/or increase soil degradation of fumigants thus reducing emissions.

Alternative Chemistries: Alternative fumigant chemistries with potentially reduced risks may include both new chemicals, such as iodomethane, and chemicals, such as propargyl bromide and propylene oxide, that are not new but which may provide advantages over some more heavily used fumigants. **Biopesticides and Biofumigants:** Biofumigants, products derived from crop plants such as pennycress seed meal, or industrially produced chemicals found in plants, such as dimethyl disulfide (DMDS), can also be effective replacements of soil fumigants. Although some alternatives are not so broad spectrum or may not even act by directly killing the target pest, they may partially replace soil fumigants. Some new products include biopesticides, diallyl disulfide derived from onions and garlic, and some bacteria and fungi cultures, have been adapted for soil treatment. Further, combinations of these and other pesticides may increase the spectrum of activity of the treatments.

Cultural Practices: In addition to the chemical alternatives, cultural practices can be effective in reducing weeds, pests, and diseases in soil. Truly ancient practices such as soil cultivation, no-till farming, hand weeding, fallowing, mulching, crop rotation, interplanting, cover crops, trap crops, selection of resistant varieties, solarization, and anaerobic soil sterilization, to name a few techniques, have seen technical improvements and new applications that together with chemicals may provide soil pest control alternatives to traditional fumigation practice. In conclusion, no simple replacements for soil fumigants exist that are not themselves chemical fumigants. Cultural practices in

combination with new and existing pesticides show promise. New models for controlling soil pests and diseases are being developed.

3. Pesticide Illness and Surveillance Program – Trends and Observations –
Louise Mehler, M.D. – Worker Health and Safety Branch

DPR maintains a surveillance program for pesticide effects on human health. The program identifies cases via legally mandated physician reporting and through cooperation with other government agencies and with poison control. Agricultural commissioners investigate all identified cases.

The program has seen a persistent downward trend in episodes of all types, although a few recent fumigant episodes have exposed exceptionally large numbers of individuals. Some of the decrease can be attributed to regulatory changes and to improved enforcement, but internal patterns raise concern that some events may escape notice, particularly in agriculture. DPR has responded with increased outreach efforts, especially to clinics that serve disadvantaged populations and sponsor lay health educators.

The recently completed annual report for 2006 shows another steep drop in case reports. The reports received include two large episodes of drift onto field workers and four unintentional pesticide ingestions caused by improper pesticide storage. Three of the four ingestions required hospitalization.

4. Report and Recommendations for the Urban Pest Management Working Group –
Nita Davidson, Pest Management and Licensing Branch

Nita discussed formation of the Working Group. It was formed in response to a previous Pest Management Advisory Committee (PMAC) Working Group (Pest Management in the 21st Century) that identified urban pest management as one of four big topics for DPR to pursue.

Goal of the Working Group

- Generate creative recommendations for the PMAC's consideration so that DPR could develop a nonregulatory urban pest management strategy.
- DPR could then leverage its resources by working with local, regional, state and federal agencies, business entities, academia, and nongovernmental organizations.

Who's in the Working Group?

- PMAC members
- Representative from San Francisco Regional Water Board.
- We also suggested bringing in others who could help round out the group's perspective.
- All meetings open and transparent—attended by several interested parties.

Director's Charges to the Urban Pest Management Working Group (UPMWG)

- Develop recommendations for the PMAC's consideration that will help DPR address pest management challenges in urban environment;
- Identify opportunities for DPR to leverage its resources through coordination with and integration of urban pest management partnerships;
- Recommend innovative partnerships with local, regional, state, and federal agencies, business entities, academia, and nongovernmental organizations; and
- Identify opportunities to integrate some recommendations by the PMAC's M21 Working Group into this effort.

Which big challenges were identified at the first meeting?

- California's population is increasing rapidly! (7–9 million people in the next 10–20 years). Likely increased pesticide use with more environmental impacts.
- Replacing one pesticide with another may not necessarily result in the desired reduction of impacts to the environment and human health, and may even be more hazardous.
- Changing people's behavior and perspective towards pest management is critical
- Collaboration of DPR and existing partners (e.g., water boards, universities), and new public and private partnerships (e.g., stormwater permittees, managers of publicly owned treatment works, public interest groups).
- Recognizing other government obligations that can affect urban pest management practices (e.g., water boards' responsibilities under State and Federal Clean Water Acts; National Pollution Discharge Elimination System permits for stormwater agencies and Publically Owned Treatment Works).
- Important to promote voluntary, preventive practices and programs in the business community (e.g., building industry use of preconstruction termiticides), and among pest management professionals.
- Opportunities need to be explored to increase and promote new business opportunities for pest management professionals to advance IPM practices, reduced-risk pesticide selection, and application practices.

Issues Identified by the UPMWG in its Report to the PMAC

1. Preconstruction Pesticide Applications
2. Perimeter Applications Around Structures
3. Pesticide–Fertilizer Combination Products
4. Sewer Line Applications
5. Treatment of People and Pets for Arthropod Pests
6. Interior Applications (e.g., to baseboards)
7. Incorporation Into Products
8. Professional Landscapers
9. Unlicensed & Untrained Applicators
10. Indoor Total-release Foggers
11. Improving Education and Outreach

- Most of these issues driven by concerns about water quality tied to urban pesticide users.
- Highlight potential impacts to stormwater districts and sewage treatment plants.
- Some of the issues reflect concerns about pesticide risk to human health.
- Consumer education and outreach were also identified as priority areas.

Action of PMAC at the February 14, 2008, Meeting

- Prioritization of the UPMWG issues should rest with DPR. The PMAC agreed to forward the entire report to the Director with the recommendation that DPR management identify and prioritize those recommendations that are feasible, in terms of realistic results and given DPR's current priorities.
- Though there was not full agreement, the majority of PMAC members recognized that it was probably best for DPR to initially focus on the recommendations fully supported by the UPMWG. PMAC members requested that the Director report to the PMAC at its May 15 meeting.

5. Risk Assessment Prioritization List #50 – Joyce Gee, Medical Toxicology Branch

The "Prioritization and Status of Active Ingredients for Risk Assessment: Report # 50" was presented to the Committee. The updated list contains 8 new active ingredients. This revised list can be found on the DPR web page at
www.cdpr.ca.gov/docs/risk/priot.pdf.

6. Water Analytical Methods – Tobi Jones, DPR

Chair Jones referenced a previous presentation at the January 19, 2007, PREC meeting by representatives of the State and regional (Central Valley) water boards regarding the need for water analytical methods in the boards' work on water quality issues. Ms. Jones announced that DPR would be moving ahead with regulations to address needs for water analytical methods for pesticides. She indicated that DPR's regulatory calendar is currently full, but that a regulation change would be pursued as time allows.

7. Agenda items for next meeting – Tobi Jones, DPR

Stella Borucki requested an update on the brodifacoum reevaluation.

The next meeting will be held on Friday, May 16, 2008, in the Sierra Room on the second floor of the Cal/EPA building, located at 1001 I Street, Sacramento, California.

8. Closing Comments – Tobi Jones, DPR

9. The meeting was adjourned.